

CLAIMS

1 1. An ARPA-Internet Network Access/Service Provider device comprising:
2 a fax gateway including,
3 a storage device for storing an e-mail message received from a sender through a data
4 communications network, the stored e-mail message being converted to a fax document for
5 transmission thereof to a fax recipient having access to a fax device;
6 at least one fax modem device for transmitting the fax document to the fax recipient
7 through a public switched telephone network,
8 wherein the ARPA-Internet Network Access/Service Provider device allows a fax
9 recipient to receive e-mail messages by the use of a fax device without requiring computer
10 equipment.

1 2. An ARPA-Internet Network Access/Service Provider device as recited in claim 1
2 wherein the storage device further for storing a fax telephone number associated with the fax
3 device of the fax recipient and for using the fax telephone number for establishing a call for the
4 transmission of the fax document.

1 3. An ARPA-Internet Network Access/Service Provider device as recited in claim 1
2 wherein the storage device for further storing a time-of-day for specifying a range of time during
3 which the fax document is transmitted.

1 4. An ARPA-Internet Network Access/Service Provider device as recited in claim 1 further
2 including a server device for storing a fax telephone number associated with the fax device of
3 the fax recipient and for using the fax telephone number for establishing a call for the

4 transmission of the fax document, said server device for further storing a time-of-day for
5 specifying a range of time during which the fax document is transmitted.

1 5. An ARPA-Internet Network Access/Service Provider device as recited in claim 1
2 wherein the storage device for further creating a fax cover page for transmission thereof to the
3 fax recipient.

1 6. An ARPA-Internet Network Access/Service Provider device as recited in claim 5
2 wherein the e-mail message includes an e-mail address and the fax cover page includes a sender
3 field extracted from the e-mail address.

1 7. An ARPA-Internet Network Access/Service Provider device as recited in claim 6
2 wherein the ARPA-Internet Network Access/Service Provider devices assigns an e-mail address
3 to the fax recipient, the e-mail address being correlated to a fax telephone number identifying the
4 fax device and wherein the fax cover page for further including a destination field extracted from
5 the fax recipient e-mail address.

1 8. An ARPA-Internet Network Access/Service Provider device as recited in claim 7
2 wherein the e-mail message includes a subject field and the ARPA-Internet Network
3 Access/Service Provider device for including the e-mail subject field contents in the fax cover
4 page prior to transmission thereof to the fax recipient.

1 9. An ARPA-Internet Network Access/Service Provider device as recited in claim 1
2 wherein the storage device for further assigning a mailbox for storage of e-mail messages

09767330-012201

3 directed to the fax recipient and upon receipt of the e-mail message, for storing the e-mail
4 message within the assigned mailbox of the fax recipient.

1 10. An ARPA-Internet Network Access/Service Provider device as recited in claim 1
2 wherein the fax gateway is coupled to the public switching telephone network through one or
3 more telephone lines.

1 11. An ARPA-Internet Network Access/Service Provider device as recited in claim 1
2 wherein the fax gateway is coupled to the public switching telephone network through a digital
3 communications links.

1 12. An ARPA-Internet Network Access/Service Provider device as recited in claim 1
2 wherein the fax gateway is coupled to the data communications network through a digital
3 communications link.

1 13. An ARPA-Internet Network Access/Service Provider device as recited in claim 1
2 wherein the storage device is a computer system having a conversion program for causing
3 conversion of the e-mail message to a fax document.

1 14. An ARPA-Internet Network Access/Service Provider device as recited in claim 13
2 wherein the storage device is a computer system having an e-mail program for causing storage of
3 the e-mail message.

1 15. An ARPA-Internet Network Access/Service Provider device as recited in claim 14
2 wherein the e-mail program and the conversion program reside externally to the fax gateway.

1 16. An ARPA-Internet Network Access/Service Provider device as recited in claim 1
2 wherein the fax gateway further for receiving a reply fax document from the fax recipient, for
3 converting the reply fax document to a reply e-mail message and for transmitting the reply e-
4 mail message to the sender.

1 17. An method for sending and receiving e-mail messages using a fax device comprising:
2 receiving an e-mail message through a data communications network;
3 converting the e-mail message into a fax document; and
4 transmitting the fax document to a fax recipient thereby enabling the fax recipient to
5 receive e-mail messages without access to the data communications network.

1 18. A method as recited in claim 17 further including the step of receiving a reply from the
2 fax recipient in the form of a reply fax document, converting the reply fax document to a reply e-
3 mail message and transmitting the reply e-mail message through the data communications
4 network.

1 19. A method as recited in claim 17 further including the step of verifying a destination user
2 address for identifying the fax recipient as being a known user.

1 20. A method as recited in claim 19 wherein upon unsuccessful verification of the
2 destination user address sending a failed message.

1 21. A computer readable medium having stored therein computer readable program code
2 comprising instructions for performing the following steps:
3
4 receiving an e-mail message through a data communications network;

09767330.012204

- 5 converting the e-mail message into a fax document; and
- 6 transmitting the fax document to a fax recipient thereby enabling the fax recipient to
- 7 receive e-mail messages without access to the data communications network.

09767330.012201